## QUICK CARD

### Ethernet Y.1564 SAMComplete Layer 2 Service Acceptance Test

This quick card describes how to configure and run a Y.1564 SAMComplete Layer 2 Traffic Test for Metro Ethernet service activation. The quick card documents a procedure to set up the OneAdvisor on a 1GigE Optical Interface, but the same workflow may be applied to other data rates.

- EQUIPMENT REQUIREMENTS
- OneAdvisor 800 equipped with the following:
  - RAxxMA-O Radio Analysis Module, SPA06MA-O Spectrum Analyzer Module, TM400GB-QQ 400G Module, or TM400GB-QO 400G Module.
  - Transport software release V5.1.0 or greater
     CA10M1GE or ONA-SP-10M1GE 1-Gigabit Ethernet option
- Optical Transceiver supporting the Ethernet data rate to be
- tested (SFP, SFP+, SFP28, QSFP28, QSFP-DD, etc.)
- Cables to match the optical transceiver and the line under test
- Fiber optic inspection microscope (P5000i, FiberChek Probe, or INX-760)
- Fiber optic cleaning supplies



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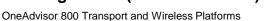
**VIAVI** Solutions

### LAUNCH TEST

- Press the Power button on the ONA-800 base top panel to turn on the OneAdvisor.
- 2. Tap 1 Home to display the Home Screen.
- 3. Tap 🔄 Tests to display the Tests menu.
- Tap Radio Analysis Transport > or 400G Transport > to show the Transport test application.
- 5. Tap the **Transport** icon.
- If the Select Test menu is not displayed, tap
   All Tests in the lower left screen corner.
- 7. Using the Select Test menu or favorite test list, launch the Ethernet Y.1564 SAMComplete Layer 2 Traffic test for the desired data rate and port (P1 or P2). For example:
  Ethernet ►1GigE Optical ►
  Y.1564 SAMComplete ► L2 Traffic ► P1
  Terminate or

#### Ethernet ►1GigE Optical ► Y.1564 SAMComplete ► L2 Traffic ► Terminate.

 Tap the Go → button next to "Start a New Configuration (reset to defaults)"





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Alemove Test	100GigE RFC 2544 (RFC 5180)	;						
Load Test	IGIGE V.1564 SAMComplete		L2 Traffic 😱 🔸	-	Terminate			
Save Test As	Layer 2 Traffic Layer 2 Multiple Stream	, 5 •	L2 Multiple Streams					
	Layer 3 Traffic Layer 3 Multiple Stream	,	L3 Traffic IPv6					

Figure 3: Select Test

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Figure 4: Configure

# **OneAdvisor 800 Transport and Wireless Platforms**



## QUICK CARD

#### CONFIGURE TEST

- The following Information is needed to configure the test:
  - Frame Size (64 to 1518, User Defined, Random, Jumbo, or EMIX)
  - VLAN ID, if VLAN tagging is used.
  - Committed Information Rate (CIR)
  - Pass/Fail Threshold for Frame Loss Ratio, Delay, and Delay Variation (Jitter)
- Tap the Next → button to display the Local Network Settings 1 screen.
  - Select the Frame Size you wish to generate.
- Tap the Next → button to display the Local Network Settings 2 screen.
  - If you are testing a VLAN, set Encapsulation to VLAN and enter the VLAN ID.
  - If you are using a VIAVI instrument or hard loop for loopback, proceed to page 3. If your loopback device is a non-VIAVI instrument that does respond to VIAVI Loop Up messages:
    - Tap <u>Set Loop Type</u>, <u>EtherType and</u> <u>MAC addresses</u>.
    - Set Loop Type to Unicast
    - Set Destination MAC to the MAC address of the loopback device.
    - Tap the **← Back** button.



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ayer	L1 ÷	Configure Triple Play
rame Size (Bytes)	EMIX *	Configure
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	1024 1280	
	1518 User Defined	
	Random Jumbo	
	EMIX	

Figure 6: Local Network Settings 1

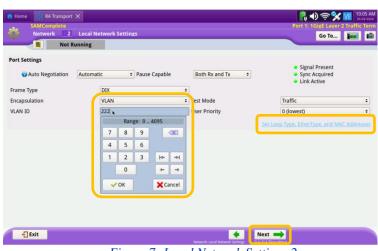


Figure 7: Local Network Settings 2

# **OneAdvisor 800 Transport and Wireless Platforms**



## QUICK CARD

- Tap the Next → button to display the SLA Throughput screen.
  - Enter the Committed Information Rate (CIR).
  - If the you are testing at full line rate or if traffic is not being policed, uncheck the **Policing** checkbox.

- 5. Tap the Next  $\rightarrow$  button twice to display the SLA **Performance** screen.
  - Enter the Pass/Fail Thresholds for Frame Loss Ratio, Frame Delay, and Delay Variation (Jitter)

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Figure 8: SLA Throughput

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			Delay Variation (ms)	2.000		
					Set advanced	SLA Settin

Figure 9: SLA Performance

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	🚊 Not Running		
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Press th	ne 'Start' button to begin J-QuickCheck	Maximum Frame Search test.	Start
	Local Port:	Remote Loop:	
	Link Lost	Status Unknown	
	Auto Negotiation: Status Unknown	1	
Ð	ixit	See	Next -

Figure 10: J-QuickCheck

6. Tap the Next  $\rightarrow$  button 5 times to display the **J-QuickCheck** screen.



## QUICK CARD

### CONNECT TO LINE UNDER TEST AND LOOP BACK DEVICE

#### ► For Optical Interfaces:

- Use the VIAVI P5000i, FiberChek Probe or INX 760 microscope to inspect both sides of every connection being used (SFP, attenuators, patch cables, bulkheads)
  - Focus the fiber on the screen.
  - If it appears dirty, clean the fiber end-face and re-inspect.
  - If it appears clean, run the inspection test.
  - If it fails, clean the fiber and re-run inspection test. Repeat until it passes.
- Insert desired Optical Transceiver into the Port 1 SFP or QSFP slot on the top of the OneAdvisor.
- 3. If necessary, insert optical attenuators into the SFP/QSFP TX and/or RX ports.
- 4. Connect the SFP/QSFP to the port under test using a jumper cable compatible with the line under test.

#### ► For Copper 10/100/1000BASE-T interfaces:

- 1. Insert Copper SFP into the Port 1 SFP or slot on the top of the OneAdvisor.
- 2. Connect the copper SFP to the port under test using CAT 5E or better cable.
- Verify that Local Port status is UP and Full Duplex (FD)
- ► Tap the **Start** button.
- ► Verify that the **Remote Loop** is recognized.
- ► Tap the Next → button to display the Run Y.1564 Tests screen.



Figure 11: Inspect Before You Connect

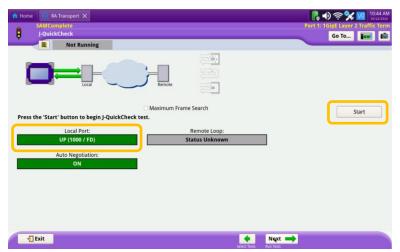


Figure 12: Local Port status

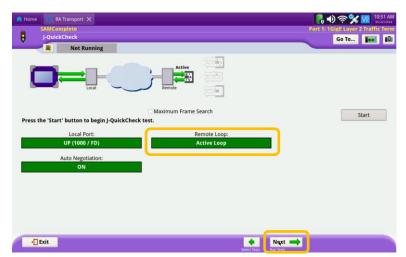


Figure 13: Run J-QuickCheck



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## QUICK CARD

#### RUN TEST

- 1. Tap the **Start** button.
- 2. Wait for the test to complete and verify that all tests pass as indicated by green checkmarks.

Pass Test C	omplete	Go To
Svc 1		Start
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### CREATE REPORT

- Tap the Next → button three times to display the Report screen.
- Report
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Figure 15: Create Report

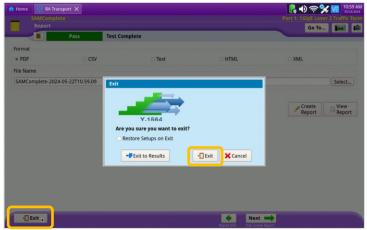


Figure 16: Exit

Contact Us

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#### 2. Tap the **Create Report** button.

 Tap the Exit buttons three times to close the report and exit the Y.1564 SAMComplete test.